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ANNUAL REPORT
OF
THE ROOKS MINING CO.
1884.

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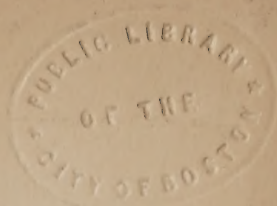
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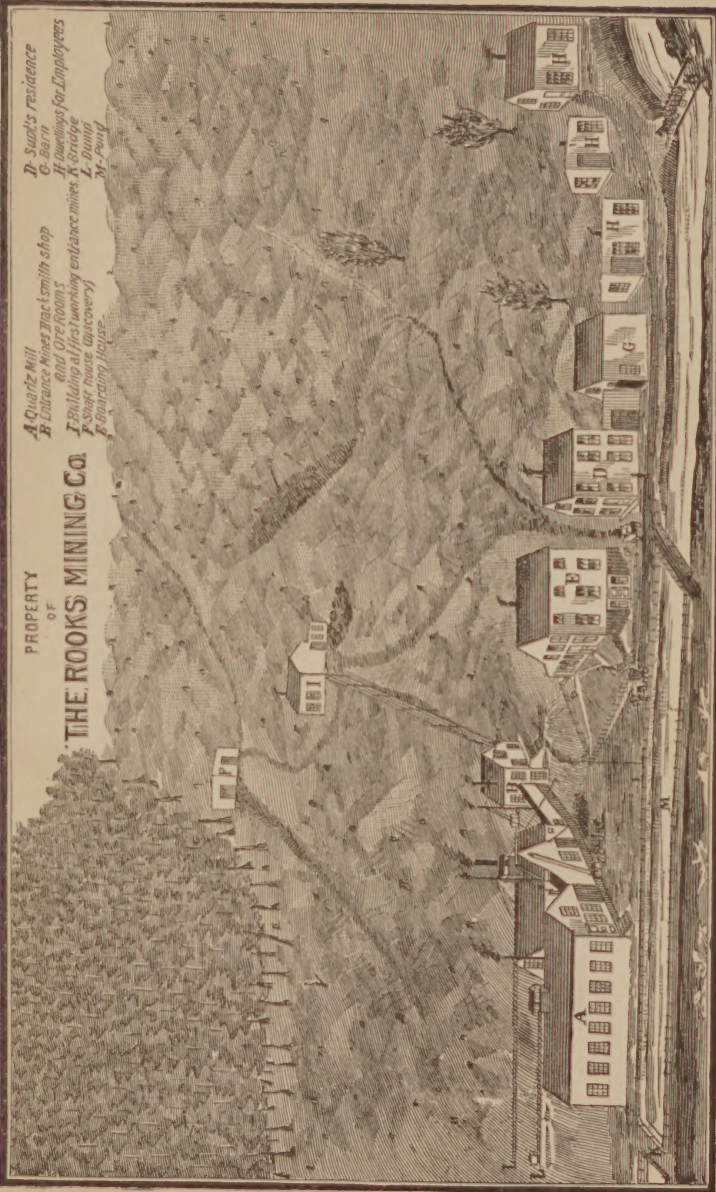
Chester Guild

Mar. 26. 1885

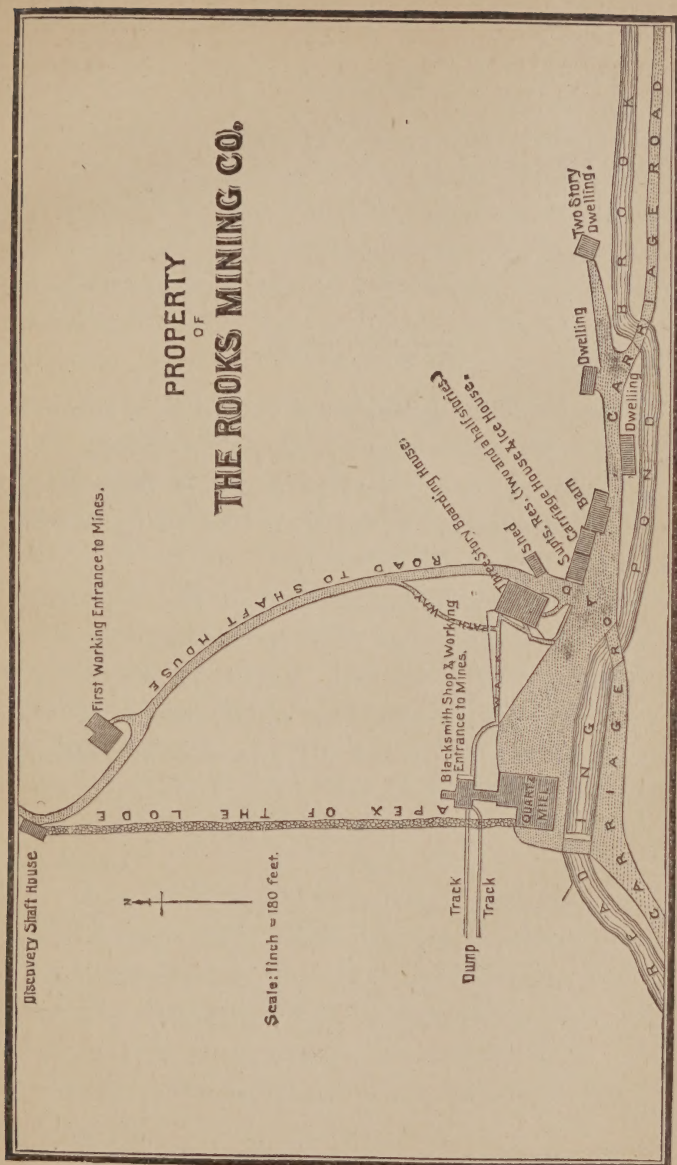
PROPERTY
OF

THE ROCKS MINING CO.

- A Quartz Mill
- B Entrance Mines Tract Smith shop and Ore Rooms
- C Building at first working entrance mines
- D Shaft house (discovery)
- E Boarding House
- F Suck's residence
- G Barn
- H Dwellings for Employees
- K Bridge
- L Dump
- M Pond



LANDSCAPE VIEW.



INTRODUCTION.

AS the public in general are very little acquainted with gold mines and gold mining, The Rooks Mining Co. takes pleasure in presenting you with this report of its directors to its stockholders.

By a careful examination of the following pages, the reader can familiarize himself with the Geology of Plymouth Vermont, Vermont's record as a gold producing state, and a review of the property owned by The Rooks Mining Company.

PREFACE.

IN 1880 a company while extensively engaged in placer mining for gold in Plymouth, Windsor County, Vermont, uncovered a lode of gold-bearing ore; placer mining was immediately abandoned and the development of the lode pushed forward, day and night, with the greatest rapidity possible. A quartz mill was erected and the proper machinery set up to treat the ore.

In the fall of 1882 The Rooks Mining Company purchased the property and carried into practical execution the plans of their predecessors. They started the mill and mine into operation on the 17th day of Sept., 1883; since that time the mine has been a constant producer of millable gold ore. The Company has paid the shareholders four dividends out of the net earnings of the Company. The shareholders are now realizing on their investments at the rate of 12% per annum on the par value of the capital stock of the Company.

The Company has made arrangements to erect a large mill suitable in size to reduce twenty times the ore per day that the present mill has capacity to reduce; and the Company accordingly will be able to realize to the shareholders a proportionate increase over the present handsome dividends.

LOCATION OF PROPERTY.

THE property of The Rooks Mining Company is situated in Plymouth, Windsor County, Vermont. This town is located in the Green Mountains, which are a part of the Appalachian Mountain chain, seven miles north by carriage road from Ludlow, a large village situated on the Rutland Division of the Central Vermont R. R., twenty-five miles by rail from Rutland, Vt., five hours ride from Boston, and nine hours from New York City.

THE PROPERTY.

THE property of this Company consists of four hundred acres of mineral lands, two thirds of which is covered with the first growth of hardwood timber. A good carriage road extends directly by the Company's Quartz Mill. Buffalo and Reading Pond Brooks, which more properly should be called creeks, traverse the property for a distance of about two miles. The former has its source in natural springs, and the latter in Reading Pond. These brooks furnish an abundance of water for mining purposes at all seasons of the year.

The improvements which have been made upon the property since the discovery of the lode consist of a thoroughly developed Gold Mine

containing over eight hundred feet of development, lineal measure. The Company has also erected a Quartz Mill and Chemist's laboratory, and supplied them with steam power and the most modern machinery and implements for the reduction of the ore. The Company also has a complete assortment of mining machinery, steam drills, blacksmith shop, extensive and elaborate kits of blacksmith, machinist and carpenter tools. In brief the Company has all the modern paraphernalia required for mining and milling ore and reducing and refining the gold.

The Company also has a boarding house, superintendent's residence, dwelling houses for employees, large barn and carriage house, ice house, etc., all recently constructed, modern in design, and substantial in structure. All the employees of the Company, including the superintendent, live at the works and enjoy all the comforts and conveniences of life, both social and domestic. Reference to engravings first and third pages.

The following tables show the quantity of ore mined and milled, yield per ton and cost of mining and milling same, construction and incidental expenses of the Company, and dividends paid up to January 1st, 1885, inclusive. The title to the property of this Company is perfect; there is no litigation pending and the Company have no debts.

DR.

CR.

By Product of Mine and Mill, U. S. Assayer's	
To 1 Engineer, 1 Rock-breaker Feeder, 1 Millman, " 1 Watchman, 3 Miners, 1 Helper, 1 Chemist, " 1 Clerk, 1 Superintendent,	Valuation from Sept. 17, '83 to Oct. 27, '83, . \$1016 70
" Do. average total per month, . . \$510 54	" do from Oct. 27, to Nov. 27, '83, . . 1795 00
" Fuel, Chemicals, Supplies, Etc.,	" do from Nov. 27 to Jan. 1st, '84, . . 2214 89
average total per month, 88 17	" do for January, '84, 2480 18
" Above for 6 1-2 mos. from 17th Sept. '83 to April	" do for February, '84, 2555 62
1st, 1884, \$3891 61	" do for March, '84, 2897 74
" Construction account, extra help, etc.	
" 1st Dividend paid April 15th, '84,	
" Cash on hand,	
	\$12,960 13

During the above period the Company mined and milled 3834 tons of ore; average expense of mining and milling \$10.15⁵/₁₂ per ton; average yield per ton \$33.81⁵/₈.

DR.

CR.

To 2 Engineers, 2 Rock-breaker Feeders, 2 Mill-men, 3 Miners, 1 Helper, 1 Chemist, 1 Clerk, 1 Superintendent,		By Balance brought forward,	\$60 50
" Do average total per month, . . \$598.00		" Product of Mine and Mill, U. S. Assayer's valuation for April, '84,	3442 66
" Fuel, Chemicals, Supplies, Etc.		" do for May, '84,	4692 03
average total per month, . . . 216.58 1-3		" do for June, '84,	6265 23
" above for April, May and June, '84, . . . \$2443 75			
" Construction account, extra help, etc.	1806 09		
" 2d Dividend paid July 25th, '84,	10,000 00		
" Cash on hand,	210 58		
	<u>\$14,460 42</u>		<u>\$14,460 42</u>

During the above period the Company mined and milled $288\frac{3}{4}$ tons of ore; average expense of mining and milling $\$8.46\frac{21}{100}$; average yield per ton, \$49.87. The mill commenced night work May 19, '84, running 20 hours per day; hitherto the mill run only 10 hours per day.

DR.

CR.

To 2 Engineers, 2 Rock-breaker Feeders, 2 Millmen,	By Balance brought forward,	\$210.58
" 3 Miners, 1 Helper, 1 Chemist, 1 Clerk, 1	" Product of Mine and Mill, U. S. Assayer's	
" Superintendent,	Valuation for July, '84,	6328.16
" Do. average total per month, . . . \$698.00	" do for August, '84,	6594.73
" Fuel, Chemicals, Supplies, etc.,	" do for September,	6690.47
average total per month, . . . 266.77 $\frac{3}{4}$		
" Above for July, August and September, '84, \$2894.33		
" Construction acc't, extra help, etc, . . . 4139.07		
" 3d Dividend, paid October 25, '84, . . . 12500.00		
" Cash on hand, 290.54		
		\$19,823.94

During the above period the Company mined and milled 388 $\frac{1}{2}$ tons of ore;
average expense of mining and milling, \$7.45 per ton; average yield per ton,
\$50.48 $\frac{1}{2}$.

DR.

CR.

To 2 Engineers, 2 Rock-breaker Feeders, 2 Millmen,	By Balance brought forward,	\$290.54
“ 3 Miners, 1 Helper, 1 Chemist, 1 Clerk, 1	“ Product of Mine and Mill, U. S. Assayer's	
“ Superintendent,	Valuation for Oct., '84,	6708.91
“ Do. average total per month . . \$698.00	“ do for Nov., '84,	6778.57
“ Fuel, Chemicals, Supplies, etc.,	“ do for Dec., '84,	7047.49
average total per month, . . \$272.20		
“ Above for Oct., Nov., Dec., '84,		\$2910.60
“ Construction acc't, extra help, etc.,		2547.08
“ 4th Dividend, paid Jan. 26, '85, net earnings to		
Jan. 1st, '85,		15000.00
“ Cash on hand,		367.83
		\$20,825.51

During the above period the Company mined and milled 404½ tons of ore; average expense of mining and milling, \$7.20 per ton; average yield, \$50.79½ per ton.

DESCRIPTION OF THE LODE.

THE croppings of the lode are visible on the Company's property for a distance of about one mile; the highest altitude of the surface croppings is about eight hundred feet above the base of the present development.

The lode consists of auriferous crystalline matrix and is imbedded between continuous permanent walls.* Strike N. 15° East, Dip. 49° 40'; the average width is about six feet, increasing as depth is gained, the ore body is encased, interstratified and tarnished with iron oxide.** Following the lode is a streak of decomposed plumbaginous slate from three to six inches in width, of a texture easily removed with the hands; next thereto is a large body of black talcose slate.† The ore is heavily charged with sulphurets of iron, and the gold obtained when refined is of a superior grade, and when in its native state is generally coated with foreign substances, and is found in feathery veins and minute particles.††

It is a well authenticated fact among mineralogists and gold refiners that the native gold obtained in Plymouth is of a fineness superior to that obtained from any known gold field having a less quantity of base metal associated with it. Hence it is of greater value per ounce than ordinary native gold. The fineness of Plymouth gold is to a degree perceptible by its color; a

* 29.

** 27, 28, 29.

† 28.

†† 28, 29.

practical miner on seeing native gold can with a considerable degree of accuracy locate the region whence it came.

The quality of the gold mined by The Rooks Mining Company is of a superior grade, and of great ductility, more so than that generally produced, and is so pronounced by experts into whose hands the same passes in transit to and through the U. S. Assay Office in New York.

The reason why the Vermont gold is superior to any other is not easy to answer, and has been the theme of much comment and persistent study by specialists in that line.

From the apex of the lode forming the axis of the mountain and the working entrance of the mine, the Company has an ore body forming a right angle triangle, the horizontal line measuring over forty-one hundred feet and the vertical line over twelve hundred and fifty feet, from which the ore can be brought to the surface by its own gravity, and also affording a natural drainage to the mine.

From the magnitude of the lode and its enormous extent, it is reasonable to believe that the lode extends to great depths into the interior of the earth; because from actual development the lode grows wider and the mineral richer as depth is acquired.

DEVELOPMENT OF THE MINE.

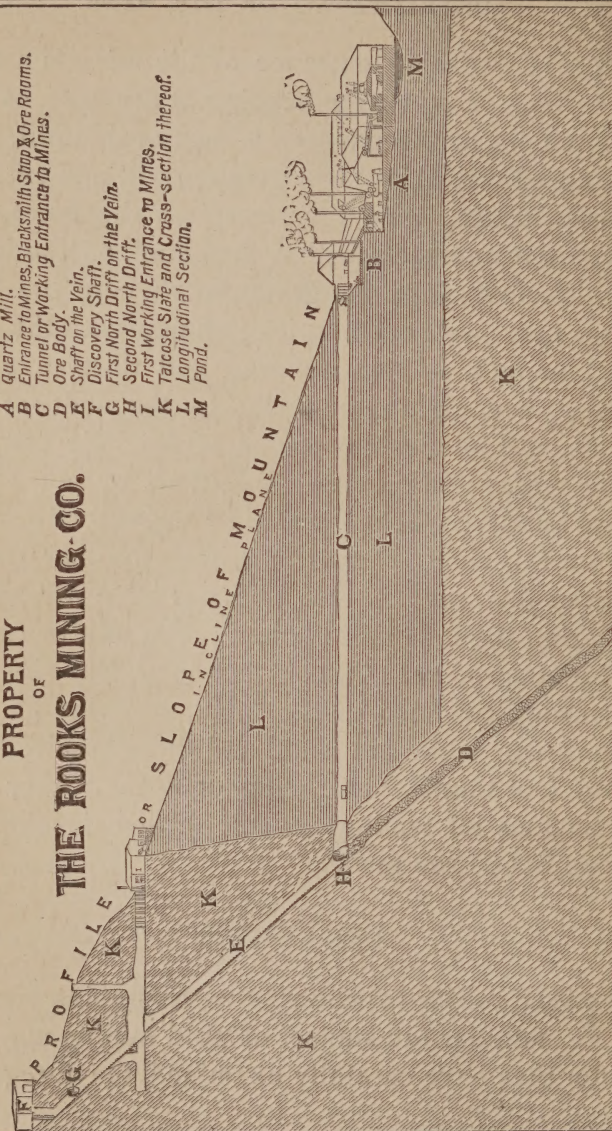
THE working entrance of the mine is a tunnel or adit, commencing at the base of the mountain, at the uppermost part of the mill, four hundred feet below Discovery Shaft, and extends three hundred and fifty feet into the mountain, where it intersects with a shaft sunk on the lode; which shaft, from the grass roots where the lode was first discovered, to its junction with the tunnel or adit, is two hundred and thirty-five feet deep, and eight feet wide, by the width of the lode, and follows the course of the lode towards the centre of the earth. A drift six by seven feet, one hundred feet long, runs in a northerly direction from this shaft. From this drift a cross-cut five by seven feet, seventy feet long, has been driven exploring the lode still further. An adit or tunnel one hundred and sixteen feet long was the first working entrance of the mine, and was in constant use while the shaft and three hundred and fifty foot tunnel were being driven. Other excavations all tending to still further develop the lode have been made.

ORE RESERVE.

THE reader to whom however foreign and unfamiliar the subject of gold mining may be, after they have carefully examined the foregoing

PROPERTY OF **THE ROOKS MINING CO.**

- A Quartz Mill.
- B Entrance to Mines, Blacksmith Shop & Ore Rooms.
- C Tunnel or Working Entrance to Mines.
- D Ore Body.
- E Shaft on the Vein.
- F Discovery Shaft.
- G First North Drift on the Vein.
- H Second North Drift.
- I First Working Entrance to Mines.
- K Talcose Slate and Cross-section thereof.
- L Longitudinal Section.
- M Pond.



CROSS-SECTION.

pages will be able to conceive of the system and perfection of the underground development of this mine.

From the commencement of the development to the present day the work has been under the immediate direction of an able mining engineer and a competent metallurgist. From the time this lode was discovered, every known improvement and the latest information on mining and the reduction of ores has been employed.

Nature has given the property numerous natural advantages, which the Company has utilized in opening avenues through which the ore can be mined and brought to the surface by its own gravity, at a cost not exceeding one dollar per ton. By the means of testing tunnels and shafts, the ore has been laid bare on all sides. No ore has been stoped.

The ore first milled was taken from the grass roots, followed by that mined as depth was gained. The mine contains very rich ore; no selection of ore has been made; all the rock contained between the walls of the lode is milled. The gold extracted and refined is sent to the Farmers' Loan and Trust Company, of New York City, from whence it finds its way into the U. S. Assay Office, in New York, for the purposes described on pages 9 to 12 inclusive.

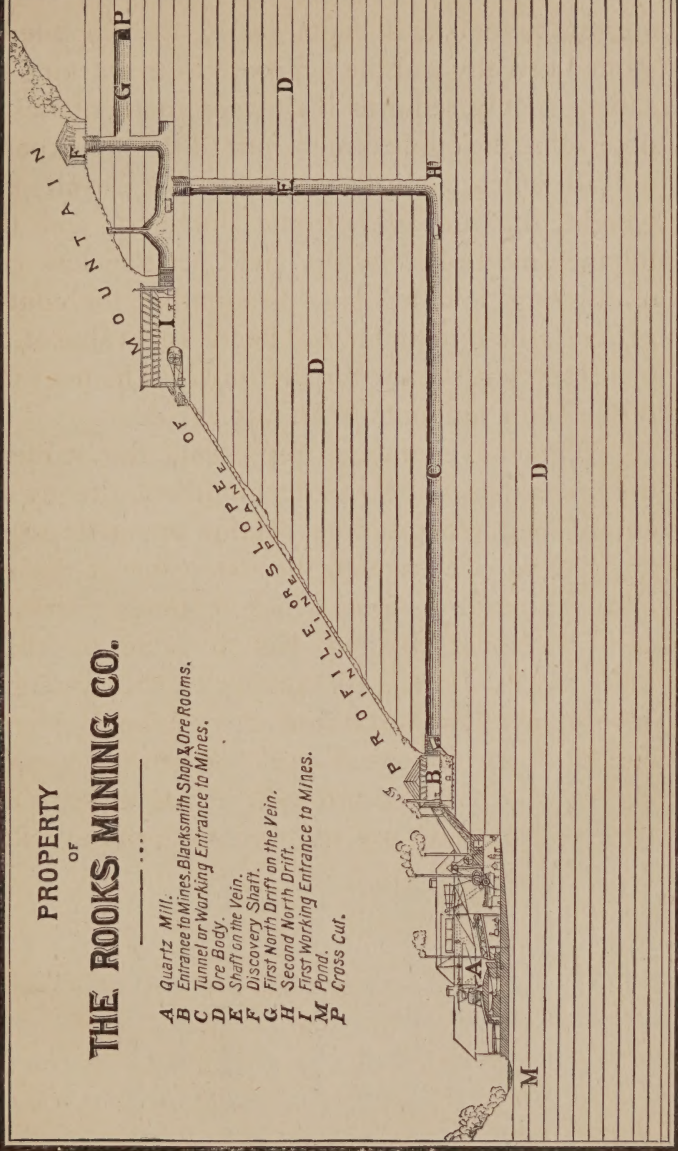
After having worked the ore taken from the

various tunnels and shafts, taking the knowledge gained thereby and the net profit from working the same, it only requires the use of mathematics to determine the cubic dimensions of the ore exposed on all sides. By converting this result into weight, the tonnage can be obtained; and this tonnage multiplied by the yield per ton, less cost of mining and milling, discounting for contingencies, the remainder will be the real value of the ore reserve all ready for the mill. The net value of the same amounts to \$1,535,274.00.

The above amount represents the value of the ore exposed by the development already accomplished, (longitudinal section opposite page), and has no reference to the extension of the ore body underlying same which extends vertically and horizontally, and has a value of many millions of dollars. By continuing the system of development as heretofore carried on, with the benefit of the increased work required in supplying ore to a hundred ton mill, in a few years this mine will show an ore reserve of enormous value.

PROPERTY
OF
THE ROOKS MINING CO.

- A Quartz Mill.
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D Ore Body.
E Shaft on the Vein.
F Discovery Shaft.
G First North Drift on the Vein.
H Second North Drift.
I First Working Entrance to Mines.
M Pond.
P Cross Cut.



LONGITUDINAL SECTION.

From the preceding page it has been made evident that with a mill of a daily capacity of one hundred tons, the Company will be able to earn for its share holders \$2,104.16 net per day; even after deducting 50% of the estimated profits for contingencies, or \$54,708.16 per month, or \$656,497.92 per year. The above is equal to \$13.12 per share, or over 131% on the capitalization of the Company. These figures may seem exceedingly large to the reader, but with the fact of an unlimited ore supply of a positive value and the proportionate reduction of the cost of mining and milling thereof, by the increased capacity, it only remains for the Company to procure the capacity to realize the earnings as estimated. The reader has observed from the preceding pages that the Company has been engaged in active business since its organization in the fall of 1882. And from the net results of the ore milled in their six ton per day mill they have paid four dividends, and are now paying at the rate of 12% per annum on the capitalization.

METHOD OF OPERATION.

IT may be of interest to the reader to be made acquainted with the practical details of gold mining as carried on by The Rooks Mining Company and the methods employed at its works to bring forth the king of all metals. In severing the ore from the lode well directed

holes from twelve to forty-eight inches deep, $1\frac{1}{2}$ inches in diameter, are drilled into the lode by an octagon steel drill with the bit pointed and measuring about $1\frac{1}{2}$ inches across. From one-fourth to one pound of dynamite is inserted in the bottom of the hole with a fulminated shell connected with electric wires attached thereto. The miner explodes the holes with a magnetic battery which connects the wires to the shell exploding any number from one to twenty-five at one discharge. By this means the ore having no contact with the foot or hanging walls is forced from its position in the lode. The excavation thus made is generally about seven feet high by the width of the lode, as the lode affords ample room for working purposes. When the excavation is carried forward in a horizontal direction, it is called a drift; when the same is carried on vertically it is called a shaft. Miners term a horizontal excavation as above described when commencing from a shaft underground a drift, and when it commences from the surface a tunnel or adit. The ore is brought to the surface in iron cars running on a well graded iron railed tramway. It is next dumped upon the bed of an iron-plated incline plane drying furnace, inclining at an angle of 40° from the horizon. This plane is 33 feet long, 2 x 6 feet wide, built of iron and fire-brick. By a system of flues under its bed,

the volatile masses of the furnace located at its base, pass to a stack at the uppermost part of the plane, thereby heating this plated plane upon which the ore passes to the crushing machines. As the ore is received below by the feeder of the rock-breaker, the mass by its own weight keeps up the supply as long as it is kept full from above. The drying is done to facilitate pulverizing. The rock or jaw breaker first reduces the ore to a uniform size, not larger than $\frac{3}{4}$ of an inch, whence it passes through powerful rollers and is crushed to minute particles and conveyed into a revolving screen. The finest is sifted into a bin, the coarser parts returned to the rolls to be made finer. Here water is introduced into the bin washing the ore into a mixing trough, and onto an incline table having an oscillating motion. The ore comes in contact with chemicals introduced in a solution with the water. By this means the ore is cleansed of foreign substances, and it passes over the table into a receptacle where it is finally treated and subjected to a mercury bath. The entire mass being repeatedly telescoped through a body of mercury, the mercury takes up the gold, the gangue passes off into sluices onto the dump. The chemist then separates the gold from the mercury, melts it into ingots and once a month all is refined and shaped into a bar or bars suitable for convenient transportation.

GEOLOGY OF PLYMOUTH, VT.

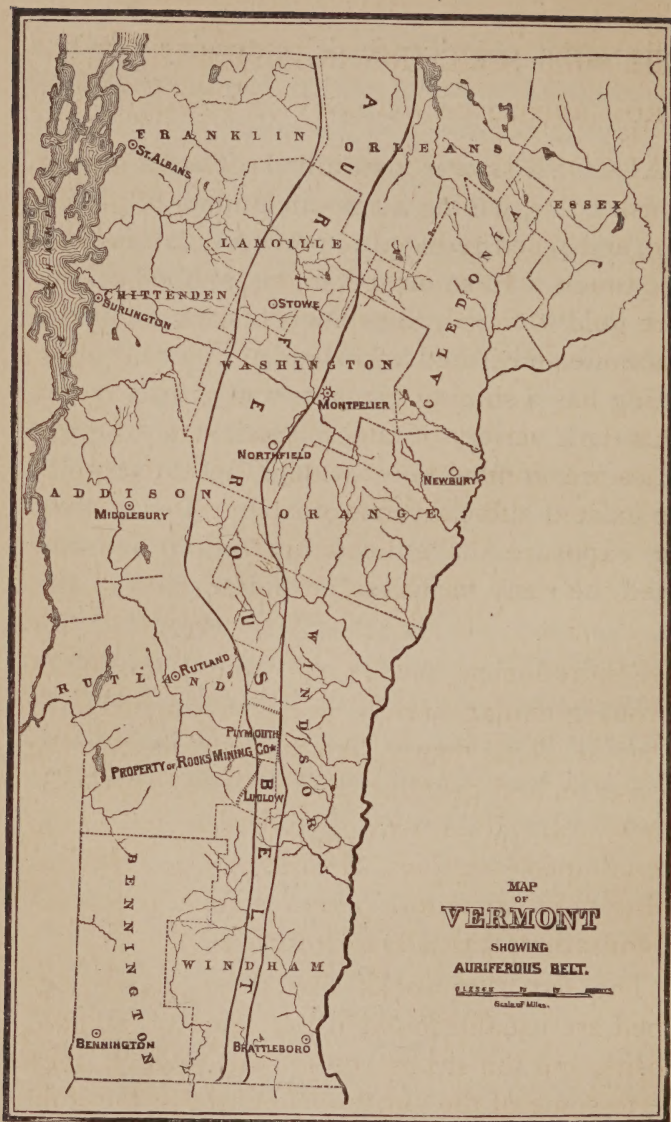
THIS subject is of such magnitude that it would be useless to undertake within our prescribed limits anything more than to make a general reference thereto, because within the town of Plymouth is found a most wonderful diversity of mineral wealth. This is also true of the State at large.

In compiling this article the directors have quoted largely from the Report on the Geology of Vermont, which was published in 1861 by the authority of the General Assembly of the State of Vermont, and in many instances the directors quote *verbatim* language of the eminent authors of the above named report, Profs. Hager of Vermont, Edward Hitchcock and Edward Hitchcock, Jr., of Amherst, Mass., and Prof. Chas. Hitchcock, State Geologist to the State of Maine.

By reference to the elaborate reports on the Town of Plymouth contained in the scientific portions of the Geology of Vermont, and from the frequent allusions to the mineral wealth of Plymouth contained therein, it will be seen that none of the towns in Vermont possess such a variety of mineral wealth or abound to such an extent with objects replete with interest to the scientific mind. Drift phenomena are abundant and interesting. Terraces of considerable magnitude, lateral and terminal moraines, drifting

glacier striæ, old river beds, extensive erasions, the extent of some of which can be definitely fixed by the existence of pot-holes on the mountain, 342 feet above the valley. The above are all found to great perfection in this town. Here, too, tertiary deposits are found of considerable extent. Metamorphism can be studied in this town to better advantage than in any other place within our sphere of knowledge.

By reference to the maps on pages 7 and 26, it will be seen that at Plymouth the auriferous belt has been compressed by a powerful pressure, developing the matrix at this point more fully than at any other point in Vermont. It will also be seen by reference to the map that the axis of this pressure is at or near the property of this Company. From the explorations and researches of geologists it is evident that the auriferous belt extends the entire length of the State, and has a width equal to that of the so-called talcose slate formation.



THE GOLD FORMATION IN PLYMOUTH, VT.

FROM REPORT ON GEOLOGY OF VERMONT.

TALCOSE slate is a stratified rock of a greenish color, having a smooth lamina of pearly lustre, and when reduced to powder it is unctious to the touch. In some specimens, and especially where gold is found, the slate is of dark color, the surface often tarnished with oxyd of iron, and upon splitting has a shining black or dark lead color. In this dark variety of talcose small slate, angular cavities are common, in which there doubtless once existed cubic crystals of iron pyrites, which, upon exposure, have become decomposed and formed the rusty tarnish upon the surface of the slate.

Concretionary masses and veins of quartz of a porous granular variety are also abundant in this town. This quartz, like the slate, has a rusty appearance, and contains cavities which not unfrequently are filled with oxyd of iron, and in the more compact portions crystals of iron pyrites are met with, some in a perfect state of preservation and others partially decomposed.

The fact that rocks like those above described are usually found in the vicinity of gold deposits, and the strong resemblance which they have to some of the auriferous ochres of the gold fields of North Carolina induced Prof. A. D.

Hager, State Geologist of Vermont, during his researches in Plymouth to carefully examine the ochre found in the cavities of quartz for gold. After several unsuccessful efforts he at last succeeded in finding gold in the ochre from a cavity in quartz, which was conclusive evidence that the gold thus found was originally associated with the sulphret of iron. But gold in Plymouth is sometimes found in small flattened masses between the lamina of slate, and in one specimen found by Dr. J. Green it was noticed that the gold traversed the length of the slate in feathery veins, crossing the lamina at various angles; and again in numerous cases it is found in quartz entirely free from any sulphret or foreign matter, and in the larger nuggets there are almost invariably small sub-crystalline masses of quartz disseminated through or adhering to it. This occurrence is so common that miners usually regard the occurrence of quartz veins in talcose slate as a sure indication of the existence of gold in the gravel overlying and in the vicinity of it.

But the result of the observations which have been made in various portions of the country induces the belief that the occurrence of gold is more common and abundant in the vicinity of black talcose slate, which is sometimes called plumbaginous slate, and which is usually found the best developed near veins of quartz of rhomb

or bitter spar, which, upon decomposition, leaves a deposit of the oxyd of iron, in which there is found gold in very fine grains.

From the foregoing it is evident that gold is not confined to one rock, but is found associated with quartz, spar, and talcose slate and the pyrites that are associated with them. Nor is gold scattered indiscriminately among all the rocks of Vermont, for it is not found in the granite, gneiss, mica schist, or clay slates, but is confined to the so-called talcose schist formation. In the undecomposed sulphurets gold is never detected with the eye, but in the oxyd resulting from the decomposition of pyrites it is often perceptible, and occurs in feathery threads and minute grains.

The gold of the Southern States and Mexico being found in the talcose slate formation, it occurred to the reflecting minds of Prof. Eaton of Troy, N. Y., and Prof. Hitchcock of Amherst, Mass., that it might also be found in the talcose slate of Vermont; hence in 1833 Prof. Hitchcock, while prosecuting the geological survey of Massachusetts, visited southern Vermont and found gold deposited in the drift formation and described it at length in his first report to the Legislature of the State of Massachusetts, pp. 65-66, and the following is the conclusion at which he arrived. After stating the circumstance of seeing it washed out, and having with the aid of

his knife "picked two or three pieces from the dirt," he adds: "Upon the whole it appears to me that the facts above stated justify the conclusion *that there exists a gold region in the lower part of Vermont of considerable extent and richness.*"

GOLD, WHERE FOUND AND WHERE NOT FOUND.

SINCE gold occurs chiefly in talcose schist, or so-called talcose slate, in Vermont as in other parts of the world, and as the average person knows very little about gold existing in Vermont, the Geology of Vermont quotes the following from writings of the most eminent geologists: "Gold occurs in lodes (veins) of quartz, brown hematite, and iron pyrites; in clay slate, gray-wacke, mica slate, Hornblende slate; in granite, gneiss, syenite, quartzose porphyry, gabbro, diorite, diabase, aphanite, serpentine, and dolomite; in the gravel and sand of rivers as nuggets, laminæ and dust, generally accompanied by quartz, brown hematite, zircon, magnetic oxyd of iron, iserine, spinel, etc." (Bischof.)

But though this metal has been found more or less in so many rocks its principal deposit all over the world is in metamorphosed silurian, devonian and carboniferous schists, frequently near their junction with eruptive rocks. Altered silurian rocks are probably its most frequent position, and the quartz veins traversing these, its

immediate matrix. It is such veins traversing talcose schist that affords gold in the Ural mountains, Australia, California, and along the Appalachian mountains of the United States. Gold occurs also in schist itself and this not unfrequently becomes decided mica schist.

It is in the talcose schist formation that gold is found in Vermont, and by looking at the space covered by that rock on our map* we can see the probable limits of any profitable explorations for that metal. No gold in quantities worth working has been found in superficial deposits of coarse sand, gravel and boulders unless lying above the talcose schist formation, neither has gold been found in paying quantities in any other formation, and with few exceptions this has been found to be the case the world over.

“When at Ludlow, Vt., I was very much
 “surprised to find some very fine specimens of
 “sulphides of copper collected near by; but I
 “had not then leisure to visit the locality (1852);
 “besides I was not then aware that all reformed
 “cupreous ores and sulphides are more or less
 “auriferous. The ores and sulphides I saw are
 “similar to the Brazilian ores in the Patent Office
 “(1856), collected by our naval exploring expe-
 “dition, and to the Chilian, Peruvian, Carolinian,
 “and Georgian auriferous pyrites. As to the

* Page 26.

“amount of gold that may be expected to be
“found in Vermont, theory furnishes no means
“of judging. We can only say, that a real gold
“formation of great extent occurs in the State, ex-
“tending in fact through its whole length, and that
“in numerous places it yields gold, sometimes
“we are told in profitable amount. But practical
“miners are the only men who can find out where
“mining will pay. Like all other gold formations,
“some veins will be found rich and others poor.”

Dr. HOMER HOLLAND, Westfield, Mass.

The following are copies of some of the items with reference to this property that have come under our notice. The newspapers publish the report of the out-puts as figured by the chemist at the mill which sometimes varies slightly from the amounts returned by the U. S. Assayer. See pages 9 to 12.

NATIVE GOLD.—We had the pleasure, Tuesday, of handling the first ingot of gold produced from the Plymouth mine. Its measurements were about $6 \times 1 \times \frac{3}{4}$ inches, weight 51 ounces 1 pennyweight, was 97-100 fine, and of about \$1,021 value. This was the result of the first “cleaning up,” which occurred October 27th; the second was under way early the present week, and much better results are anticipated from it. The Plymouth hills have at last fallen into the hands of men who can make them disgorge their long concealed treasures in paying quantities, and we are glad to note this success; certainly they have by their energy and faithfulness deserved it.

— *Vermont Tribune, Ludlow, Vt., Nov. 30, '83.*

A BAR OF GOLD.—A bar of gold dug from the soil of New England is a novelty, but a bar worth \$2,891 was exhibited in the Journal office to-day by Mr. H. L. White, Treasurer of “The Rook’s Mining Company” of Plymouth, Vt. In

less than six months they have taken out \$13,000 worth of gold, at a cost of \$5,000. They have valuable machinery, and propose to test the vein they have struck to the utmost. The stock is owned by a few individuals, and the first dividend on 50,000 shares is 17 cents per share.

—*Boston Evening Journal, April 4, '84.*

The announcement in another column, that The Rooks Mining Company will pay its first dividend, of seventeen cents per share, on the 15th of the present month, of itself conveys no intelligence of special significance. But when it is further stated that this dividend is paid with gold dug from the soil of New England, and that there is more of the precious substance where this came from, the matter becomes at once of interest to our readers. The Rooks Mining Company are operating at Plymouth, Vt. Within the last six months while they have been doing preliminary work, putting in machinery, etc., they have taken out \$13,000 in gold at a cost, as is claimed, of about \$5,000. A bar of gold from the mine, valued at \$2,891, was on exhibition at the treasurer's office in Boston last week.

—*The Mining Industrial Journal, Bangor, Me., April 11, '84.*

The fact that Vermont has a dividend paying mine elicits the following from a San Francisco journal:

Vermont has not heretofore been considered a very inviting field to look for mining dividends. If there are any mines in the old Green Mountain State, the public are not generally aware of it. We have never until now seen any account of any mines or mining dividends in Vermont. A notice in a New York paper informs us that the Rooks Mining Company, of Plymouth, Vermont, paid a dividend of 17c. per share at Boston on the 15th. That is better than the world-renowned State of Nevada has done this month, for the only dividend declared by Nevada this month is the 10c. per share dividend of the Kentuck mine, which will be paid on the 19th instant, amounting to \$3,000. The number of shares in the Rooks Mining Company of Vermont is not known here.

—*Financial and Mining News, New York, April 28, '84.*

A VERMONT GOLD MINE.—As much curiosity has been expressed concerning the existence of a gold mine in Vermont belonging to a company that is actually paying dividends, a Financial and Mining News reporter yesterday called

upon Mr. Anthony Blum, president of the company, at No. 53 Broadway, for some particulars connected with the Rooks Mining Company. The mines and mills of the company are at Plymouth, Vermont, six miles from railroad communication at Ludlow, Vermont. The company is crushing their ores by Cornish rolls, the ore being practically free milling. The vein is five and a half feet wide between walls. The country rock is talcose slate; the foot wall, porphyry; the hanging wall, oxide of iron next to a mica schist. The production of the company since it started work has been as follows:

October 1883,	. . .	\$1,016.00
November “	. . .	1,795.00
December “	. . .	2,214.89
January 1884,	. . .	2,480.18
February “	. . .	2,555.62
March “	. . .	2,897.74
April “	. . .	3,445.00

This shows a gradual progression of returns. The ore is thought to be milling about \$40 per ton, but no weights have been taken to make sure of the amount reduced. The monthly expenses are only \$800, showing that genuine Yankee economy is being practised in running the property.

—*Financial and Mining News, New York, May 7, '84.*

Vermont having a gold producing mine paying regular dividends, of which the press have

written, might be of interest to our readers to know something more about the early history of this property. We find in the *Geology of Vermont*, published in 1861, by Albert D. Hager: "William Hankerson, returning from California in 1858, discovered the first gold in Plymouth, Vermont, and for several years carried on successfully sluice mining," etc. After Mr. Hankerson's death, the work was continued by his successors taking out a goodly quantity of gold. In 1880 a party of western men purchased about 400 acres, taking in the most valuable tract of these diggings, and commenced extensive operations in sluice mining. While thus working they uncovered a promising gold bearing vein, which later on was traced, by its surface croppings, a distance of about one mile, to the top of the mountain, believing it to be one of the sources whence more or less of the placer gold had disintegrated; sluice mining was suspended, and work commenced on the new discovery on the mountain, about 400 feet above Gold Brook. As depth was gained the vein proved richer, work was pushed forward night and day. Two years later the owners erected a mill, boarding house and other buildings for the purpose of milling the ore and refining the gold on the premises. This great outlay of money caused some of their number to become financially embarrassed. They were forced to sell

and in the fall of 1882 The Rooks Mining Company, a New York corporation, of 53 Broadway, this city purchased the entire property, carried out the plans of their predecessors, erected tenement houses and dwellings for their employees, and in September, 1883, started their mills into motion. Their yield of gold is shipped monthly to the Farmers' Loan & Trust Company of this city; amounts thereof have already been published. The mine has not stoped a ton of ore; the mill is supplied by development. The underground workings has now in sight ready to stope, estimated from the value of the ore taken out and milled, over \$3,000,000 worth of ore. When the lower adit is connected with the winze now in progress the mine will be able to yield ore permanently ten times the capacity of their mills now in operation without hoisting either ore or water. With the splendid advantages of being within eight hours by railraod from New York city, abundant low priced labor, in a timbered country, the natural advantages of the lode, and the record already made, the Rooks mine has a future before it that will make itself conspicuous on the tablets of gold production.

—*Daily Stockholder, New York, Aug. 7, '84.*

Advices from the Rooks mine, of Vermont, continues as favorable as usual, and saying that

they are pushing forward the work connecting lower adit with winze at the rate of 10 feet per week at each end. The mill is doing the usual amount of work, and some rich ore has recently been taken out of breast of north drift. It is officially reported that the production since October, 1883, up to the end of September, 1884, was \$46,970.41, and during the last quarter of 1883, the product was \$5,026.59, and during the first six months of this year it was \$22,333.46, and the product since then has been: July, \$6,-028.16; August, \$6,594.73; September, \$6,690.47; total third quarter, 1884, \$19,613.36.

—*N. Y. Daily Stockholder, Nov. 5, '84.*

The Rooks Mining Company of New York which is engaged in gold mining at Plymouth, Vt., has just completed the sinking of a shaft from a point in the side of the mountain to a depth of 224 feet, following the vein of gold ore. At the same time a tunnel has been excavated from the base of the mountain, nearly horizontally, 328 feet, to a point at the lower end of the shaft, or near it. At the foot of the shaft a cross-cut of 17 feet in length was excavated to intersect exactly with the incoming tunnel, and the problem has been to run the tunnel so as to meet this point under the mountain. The shaft is not vertical,

but has a dip of 49° and 40' with the horizon, and after extending down the rock, following the dip of the ore vein to the proper depth, it stops and then runs horizontally 17 feet, forming a chamber or cross-cut to the point where the tunnel coming in from the base of the mountain was designed to strike. The tunnel is not exactly level, but has an inclination of one sixty-eight one hundredths feet in 368 feet. After the shaft and cross-cut were completed, the work of excavating the tunnel from the cross-cut outwards to meet that portion of it which was being driven from the outside inwards was begun, and much anxiety has been felt by the company and much curiosity by the people in the vicinity, respecting the success of running the two portions of the tunnel together. During the last two or three weeks the workman in each section of the tunnel could be heard by the others. On Thanksgiving night this thin partition was pierced and the two sections were united. Both sections of the tunnel came together on the dot.

The product of the mine for November is one bar of bullion of $329\frac{1}{4}$ ounces, valued at \$6,788, which has been received at the office in Boston.

Boston Daily Advertiser, Dec. 8, '84.

It will be a surprise and delight to most people to be informed that there is a mining company in New England which is actually paying regular dividends, and that it has just received at its office in this city a bar of gold bullion weighing $329\frac{1}{4}$ ounces and valued \$6,788. The mine in question is that of the Rooks Mining Company, at Plymouth, Vt., and the office of the Treasurer, Mr. H. L. White, is at room 8, Tremont Temple, Boston.

Boston Commercial Bulletin, Dec. 13, '84.

The Rooks Mining Company of Vermont has elected as directors Charles Gay of Auburn, Me., William H. Garfield and H. L. White of Boston, Mass., A. D. Bennett of Brooklyn, N. Y., and Anthony Blum of New York. The company has voted to erect a mill of the daily capacity of 100 tons, and this done, the company's monthly product will exceed the present product per year. The mill now in use has a capacity of about six tons per day.

Boston Daily Herald, Jan. 6, '85.

PLACER MINING IN PLYMOUTH, VERMONT.

THE first certain knowledge of the existence of a native gold field in Vermont was in 1851, when Mathew Kennedy, at or near the north end of Plymouth, found what he supposed to be very fine specimens of iron pyrites imbedded in a quartz rock. After having these specimens tested it was found that they were nuggets of pure gold and more than \$5.00 worth of gold was taken out of about 1 cubic foot of quartz rock.

A search was then made in the vicinity of the first discovery without much success. In 1855 William Hankerson, an experienced California miner, went to Plymouth, Vt., on a visit, and being impressed with the resemblance of this region to the gold bearing formation of California, and believing that placer gold could certainly be found there, began to prospect on Reading Pond Brook in the southern part of the town, where he obtained the first gold found in the streams of Vermont.

In 1856 placer mining was begun on Reading Pond Brook and on Buffalo Brook, its largest northern branch, and also on Gold Brook at Plymouth Five Corners; and during that year and the next four years a large amount of gold was taken out and some large nuggets were found. Sawyer & Eddy took out below the junction of Reading Pond and Buffalo Brooks, a nugget worth

\$14.00; a Mr. Williams, on the next claim below, took out one worth \$31.00; and quite a number of other nuggets were found for one mile or more below the junction of the brooks worth from \$1.00 to \$5.00 each. William Hankerson worked a very rich claim at Plymouth Five Corners and took out several very valuable nuggets, one of which was worth \$9.30, and also J. S. Wilder and Augustus Trudo, for Boston parties, have taken out large amounts of gold at this point. Many claims were dug over on Reading Pond Brook and on Gold Brook, further north. Among those who were most successful in finding gold in paying quantities were Beals & Graves, Sawyer & Eddy, the Wells Bros., William Hankerson, Dunham & Brown, A. S. Day, and Virgil Woodcock. The product of the placer workings amounted to over \$20,000 in gold taken out.

There was something done about that time in testing the quartz lodes which were found in the southern part of Plymouth, and assays were made that ranged from \$2.50 to \$57.00 per ton. Nothing, however, was assayed except croppings taken from the surface of the lodes.

INDEX.

	<i>Page.</i>
Landscape View of Property,	1
Plan of the Plant,	3
Introduction,	4
Preface,	5

LOCATION OF PROPERTY.

Location of Mine,	6
Ludlow, Windsor County, Vt.,	6
Distance from Rutland, Vt.,	6
“ “ Boston,	6
“ “ New York,	6

THE PROPERTY.

Acreage,	6
Water Privileges,	6
Gold Mine,	6
Map of Cross Section and Boundary Line,	7
Quartz Mill and Laboratory,	8
Power Employed,	8
Machinery,	8
Blacksmith Shop,	8
Blacksmith, Machinist and Carpenter Tools,	8
Buildings,	8
Employees Reside,	8

YIELD, DIVIDEND AND EXPENSE ACCOUNTS.

Quantity of Ore Mined and Milled,	9-12
Cost of Mining and Milling,	9-12

Average yield per ton,	<i>Page.</i> 9-12
Construction and Incidental Expense Acc't,	9-12
Net Earnings—Dividends,	9-12
Number of Men Employed,	9-12

DESCRIPTION OF THE LODE.

Composition,	13
Croppings visible,	13
Strike and dip,	13
Gold in native state,	13
Apex of the Lode,	14
Natural Drainage,	14
Depth of Lode,	14

DEVELOPMENT OF THE MINE.

Shafts, Drifts, Adits or Tunnels,	15
---	----

ORE RESERVE.

Map of Cross-section,	16
Natural Advantages of Mine,	17
Ore Mined, taken where from,	17
Gold, how disposed of,	17
Reserve, how obtained,	17-18
“ what constitutes,	18
“ how established,	18
“ aggregate value,	18
Value of Ore in sight,	18
Reasons,	18
Map longitudinal section of Mine,	19
Expense and Earnings of new mill,	20
Net “ “ “	21

METHOD OF OPERATION.

	<i>Page.</i>
Ore Mined, how,	21
How disposed of,	22
Treatment in the mill,	23

GEOLOGY OF PLYMOUTH, VT.

Quoting largely from Profs. Hager, A. M., of Vermont, and Edward Hitchcock, L. L. D., Edward Hitchcock, Jr., M. D., of Amherst, Mass., and Chas. H. Hitchcock, A. M., Geologist, to the State of Maine,	24-32
Drift Phenomena,	24
Terraces, Moraines, Glacier Srtiæ,	24-25
Tertiary Deposits,	24
Metamorphism,	24
Pot Holes,	25
Map of auriferous belt,	26

THE GOLD FORMATION IN PLYMOUTH, VT.

What is said with reference thereto,	27-30
--	-------

GOLD, WHERE FOUND AND WHERE NOT FOUND.

Ural Mountains, Australia, California, etc.	31
Bischof,	30
Dr. Homer Holland,	31-32
Newspaper clips,	33-41

PLACER MINING IN PLYMOUTH, VT.

First Placer Mining,	43
First knowledge of Gold in Vermont,	42
Most Successful Miners,	43
Capital, Stock, Trustees, etc.,	47

The Rooks Mining Company,

A corporation chartered under the laws of New York.

CAPITAL STOCK,	-	-	-	\$500,000.
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50,000 SHARES, PAR VALUE	-	\$10.
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FULLY PAID UP AND NON-ASSESSABLE.

Mines and Mill at Plymouth, Vt.

COMPANY'S OFFICE, 53 BROADWAY, N. Y.

Officers :

ANTHONY BLUM, Prest.,	H. L. WHITE, Secy. and Treas.,
53 Broadway, N. Y.	Tremont Temple, Boston, Mass.

AUGUSTUS TRUDO, Supt.,
Plymouth, Vt.

Railroad, Telegraph Station and Post Office address, for all communications
for the mines, Ludlow, Vt.

Trustees :

ANTHONY BLUM, New York City.

H. L. WHITE, Boston, Mass.

CHAS. GAY, Auburn, Maine.

WM. H. GARFIELD, Boston, Mass.

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